

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to the claims have been considered but are not persuasive. Applicant states on page 6, "the Adams reference is directed to towards...transmitting three data streams (audio, video and data)...In contrast, the presently claimed invention is directed towards transmitting audio or video data, binary data as well as private data". Furthermore, on page 7, applicant asserts, "the presently claimed invention which claims audio or video data, binary data and private data".

It appears that applicant, argues that the claims require at least one of an audio or video data and separately binary data, and separately private data. In other words, it appears that applicant argues that the claims require three separate channels.

However, it is pointed out that amended claim 1, recites, 'at least one of audio, video data, binary data for play on a playing device and private data', emphasis added. Alternatively, the claim recites, 'a receiver which receives said digital signal at user locations and plays at least one said audio, or video data and binary data', emphasis added. Therefore, as written the claims do not require three separate channels. At best, the claims require at least one audio data, video data and binary data (i.e., 1<sup>st</sup> channel) and separately, private data (i.e., 2<sup>nd</sup> channel).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5-7 & 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wistendahl, (U.S. Pat # 5,708,845), in view of Matsubara, (U.S. Pat # 5,699,106).

Considering claim 1, the claimed system for providing an interactive look-and-feel in a playing device receiving digital information:

Regarding the claimed, *'signal generator which generates a digital signal comprising interleaved bits of at least one audio or video data, binary data for play on a playing device, and private data'*, Wistendahl teaches that the interactive video system at server 30 transmits Frame data (corresponds with audio or video data); N data & IDM program (corresponds with private data); see col. 5, lines 45-67; col. 6, lines 1-41; col. 8, lines 24-35; Fig. 2. As for the claimed *'signal generator'*, Wistendahl discloses that the interactive data stream is authored by associating indexed N data with the corresponding frame data, and is transmitted to the subscribers, see Fig. 5A; Fig. 5B; col. 9, lines 15-67 & col. 12, lines 10-50.

The claimed *'private data that includes an event identification for the at least one audio, video or binary data for linking to additional at least one audio, video or binary data, such that each hot-spot is linked to at least one of the additional audio, video or binary data, wherein the link data includes a set of coordinates defining a location on the playing device'*, reads on Wistendahl, which teaches that the N data defines the area encompassing the hot spot on the screen, see col. 5, lines 45-67; col. 9, lines 10-25. As for the claimed, *'synchronization time'*, is broad enough to read on the frame # associated with hot spots, as discussed by Wistendahl, see col. 5, lines 21-45; col. 11, lines 25-45; Fig. 2 & Fig. 5C. The *'link data including a set of coordinates defining allocation on the playing device'* reads on the disclosure in Wistendahl, col. 5, lines 25-65; col. 8, lines 39-55.

As for the further claimed, *'link event identification indicating the additional at least one of audio, video data and binary data'*, reads on Wistendahl, see col. 8, lines 29-68; col. 9, lines 1-45. As for the amended claimed, *'continuously broadcasting the digital signals from a head end server without transmission from the playing device for playing the at least one of audio, video and binary data and the additional at least one audio, video and binary data'*, Wistendahl is directed to the transmission of the interactive programming over a variety of transmission networks, including at least CATV, col. 6, lines 56-67. However, Wistendahl does not explicitly discuss *'continuously broadcasting'*. Nevertheless, Matsubara teaches that the menu screen and channel information are cyclically transmitted and the invention is operated without up-link transmission, (col. 6, lines 25-67; col. 8, lines 41-62). It would have been obvious for one of

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ordinary skill in the art at the time the invention was made, to operate Wistendahl in a manner that the interactive data is cyclically transmitted as taught by Matsubara, which avoids the need to up-link transmission which at least may increase the response time of the system.

As for the additionally claimed feature of the '*private data*' including '*an indication of the number of hot-spots*', the claimed subject matter is met by the disclosure of Wistendahl that the N data lists a value for each hot spot, such as A' ( $F_i$ ) for the hot spot of object A; B' ( $F_i$ ) for the hot spot of object B, etc, see Fig. 2; col. 6, lines 15-40. Thus the indication of the number of hot spots reads on the highest alphabet (A', B', C', etc.) attached to the instant hot spot and listed in the N data, since the hot spots are sequentially listed.

The claimed '*means for broadcasting the digital signals*', is met by Wistendahl since the video is converted to digital before transmission, see col. 5, lines 25-45; col. 7, lines 1-12.

The claimed '*receiver which receives the digital signal at the user locations, and plays at least one of audio, video or binary data on the playing device, and selectively features the hot-spots*', reads on the STB 32, see col. 7, lines 35-67 thru col. 9, lines 1-27 & Fig. 4.

Regarding the amended claimed features, '*wherein the set of coordinates defines two or more points, and wherein the receiving device comprises a processor*', Wistendahl teaches that the N data defines a set of pixels, see col. 4, lines 61-67 thru col. 5, lines 1-65. The claimed

'processor' is met by the operation of the console processor 40; see Fig. 4; col. 8, lines 65-67 thru col. 9, lines 1-55.

Considering claim 3, the claimed, *'private data enabling a plurality of portions of the broadcasted signal to be separately selectable'*, reads on the coordinates of each graphic icons that are selectable, separate from each the other, a taught by Wistendahl.

Considering claim 5, Wistendahl teaches the data may alternatively be operated in MPEG format; see col. 10, lines 59-67 thru col. 11, lines 1-45, which would require an MPEG encoder at the transmitter and decoder at the receiver, in order for the system to properly operate. Also see Matsubara, col. 3, lines 35-40.

Considering claim 6, reads on the frame numbers associated with each hot-spot, see Fig. 2; col. 5, lines 21-65; col. 11, lines 25-45.

Considering claim 7, the claimed method for providing an interactive look-and-feel, comprises steps that correspond with subject mater mentioned above in the rejection of claims 1, and is likewise analyzed.

Considering claims 10-11, Wistendahl meets the claimed subject matter, Fig. 3 & Fig. 4.

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Considering claim 12, reads on Wistendahl receiving the digital interactive signal and processing at the STB 32, see Fig. 4.

Considering claim 13, the claimed subject matter is consistent with the operation of Wistendahl & Matsubara and reads on selecting a hot-spot, which links to additional information.

Considering claim 14, the claimed processor reads on the console processor 40 in Wistendahl.

Considering claims 15-17, the STB 32 in Wistendahl meets the claimed subject matter, Fig. 4; col. 8, lines 20-65.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Hoddie Teaches linking video frames within a TV signal.

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Any response to this action should be mailed to:**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

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